



# Ionization Systems

## AeroBar<sup>®</sup> Ionizer








### MODEL 6685

ION Systems AeroBar Ionizer Model 6685 is designed to control static charge in mini-environments, laminar flow hoods and workstations. The Model 6685 features a unique aerodynamic design that ionizes a local area without disrupting laminar flow. Ideal in 12-24 inch distance applications with laminar air flow, the Model 6685 utilizes steady-state DC ion emission and ION Systems patented IsoStat<sup>®</sup> Technology. IsoStat technology guarantees intrinsically balanced ionization. No complicated feedback circuits are required to maintain balance and adjustment is never needed. The Model 6685 is available in four different lengths and installation is fast, using easy-mount clips. Plug and play, the ionizer provides balanced ionization upon power up and is ideal for laminar flow hoods in General Electronics and Medical assembly applications. The AeroBar may also be installed over work tables in cleanroom areas where HEPA filters are present.

### Features & Benefits

- Patented IsoStat technology
- Intrinsically balanced output of both positive and negative ions, making it ideal for any surface charge applications; low offset voltages; no calibration needed
- Steady-state DC ion emission for high ion density
- Fast discharge when combined with typical laminar air flows for ion delivery
- Tungsten emitter points
- Compatible material for processes requiring ISO 14644-1 Class 5 standards (Fed. Std. 209e) Class 100 equivalent
- Multiple lengths, including short 11 inch AeroBars
- Ability to install in a multitude of hood, workstation and mini-environment sizes

# Specifications

<b>Input Voltage</b>	24 VAC ( $\pm 10\%$ ), 50-60 Hz, 3.5W (max)
<b>Output Voltage</b>	7.5 kV (typ)
<b>Indicators</b>	Green power LED
<b>Ion Emission</b>	IsoStat steady-state DC
<b>Emitter Points</b>	Tungsten wire
<b>Airflow</b>	60 fpm minimum required at bar for proper operation
<b>Discharge</b>	25 sec. or less for $\pm 1000V$ to $\pm 100V$ discharge @ 24 in. <sup>1</sup> with min 60 fpm airflow
<b>Balance</b>	$\pm 50V$ @ 24 in.
<b>Mounting</b>	Two mounting clips provided, various clips and hangers available
<b>Operating Environment</b>	59-95°F (15-35°C), nominal; 20-60% RH, non-condensing
<b>Dimensions</b>	2.1H x 1.13W x 11, 22, 44, 64L in.) (5.3H x 2.9W x 27.9, 55.9, 111.8, 162.6L cm)
<b>Weight</b>	9 oz per foot of bar length (255g per 0.3m)
<b>Warranty</b>	Two year limited warranty
<b>Certifications</b>	RoHS Compliant   pending
<b>Transformer 14-1306</b>	
<b>Input Voltage</b>	100 VAC $\pm 10\%$ , 50 Hz, 300 mA
<b>Output</b>	24 VAC, $\pm 5\%$
<b>Certifications</b>	RoHS Compliant 
<b>Transformer 14-1310</b>	
<b>Input Voltage</b>	120 VAC $\pm 10\%$ , 60 Hz, 270 mA
<b>Output</b>	24 VAC, $\pm 5\%$
<b>Certifications</b>	RoHS Compliant 
<b>Transformer 14-1523</b>	
<b>Input Voltage</b>	230 VAC $\pm 10\%$ , 50/60 Hz, 3W
<b>Output</b>	24 VAC, $\pm 5\%$
<b>Certifications</b>	RoHS Compliant   

1. Tested in accordance with ANSI/ESD STM3.1-2000.

## Convenient Power Choices

The Model 6685 may be powered by one of any three available transformers for 24 VAC power. For 100 VAC input, use the 14-1306 transformer; for 120 VAC input, use the 14-1310 transformer; for 230 VAC input, use the 14-1523 transformer.

## Patented IsoStat Technology

ION Systems patented IsoStat technology is the first balancing technology for ionizers to guarantee intrinsically balanced ionization and elimination of complicated feedback circuits. IsoStat is based on a law of physics, Conservation of Charge, which states that charge cannot be created or destroyed in an isolated system. By isolating the ionizer's emitter points from ground, IsoStat ensures equal numbers of positive and negative ions. Characteristics of IsoStat ionizers include:

- Ionizers never need calibration and require very little maintenance.
- Small size and operation without grounding wires.

## Ordering Information

<b>91-6685T-xx-01</b>	AeroBar with Tungsten wire emitter points in -11, -22, -44, -64 inch bar lengths
<b>14-1306</b>	100 VAC Transformer
<b>14-1310</b>	120 VAC Wall Transformer
<b>14-1523</b>	230 VAC Transformer



### ION Systems

1750 North Loop Road  
Alameda, CA 94502

Tel: 800.367.2452 (in USA)  
Tel: 510.217.0600  
info@ion.com  
www.ion.com